

## Healthy Planet Forum : Workshop of nuclear waste watch coalition

23-6-2004, in Budapest

Nuclear waste management: research and policy in the European Union  
is it responsible to plan an international repository ?

-

Speaker: Antonia Wenisch

For the past two years the European Commission has tried to push through a common nuclear waste directive. This directive should guarantee that all EU countries develop waste management programs in order to find a solution for the final storage of all their radioactive waste and the spent fuel of nuclear power plants. The proposed directive has been rejected by many member states, NGOs and the nuclear industry as well. Under these circumstances, without any sound solution of the nuclear waste storage problem, it is irresponsible to support the construction of nuclear power plants.

EU activities are influenced by a strong lobby which aims to change political conditions in order to achieve a revival of the nuclear industry.

Eurotam money is not only spent for safety improvement of old plants in East European countries (eventually also for new ones), and for the closure and decommissioning of some of the wrecks. Euratom money is also spent for research projects which support the nuclear industry.

In the 6th framework program for EU funded research the budget for nuclear projects has increased compared to the last period and the funding for other energy research was cut down.

### EU research budget

framework programs ( in million EURO)

		energy	euratom
FP5: 1998-2002	14679	1042	810
FP6: 2002-2006	17500	979	1230

The EU has 90 million Euro to spend 2002 – 2006 on waste management research. However, the research focuses on technical feasibility of the deep geological repository, and the idea of transmutation. Under the pretext to reduce the amount of high level waste the EU finances research into transmutation which aims to develop new fuel cycles and new reactors.

### EC contribution to research projects commissioned in FP 6

nuclear energy program - key action: management of radioactive waste

(status April 2004)

Project	description	MEuro
NF-PRO (IP)	modelling of key processes in the near field of DGR s	8,00
COWAM 2 (STRP)	governance of nuclear WM and disposal in Europe	1,2
SAPIERR (SSA)	pilot initiative for european regional repositories	0,2
ESDRED (IP)	engineering & demonstration of repositories design	7,3
EUROPART (IP)	partitioning of actinides in HLW from SF reprocessing	6,0
RED-IMPACT	impact of p&t on final nuclear waste disposal	2,0

<b>Project</b>	<b>description</b>	<b>MEuro</b>
ACTINET-6 (NE)	network for actinide sciences	6,3

**IP:** Integrated Project, **STRP:** Specific Targeted Research Project  
**SSA:** Specific Support Action, **NE:** Network of Excellence

The first projects commissioned in this part of the program are:

**NF-PRO** shall develop models for evaluating the engineered barrier systems of geological repositories in connection with their environment ...

**ESDRED:** aims to demonstrate the technical feasibility to construct, operate and close a DGR at an industrial scale ..

**EUROPART:** shall develop reprocessing processes of SF in order to separate minor actinides, which could be either destroyed by transmutation or vitrified and stored separately, but it also develops new separation technologies for U, Pu, NP .

**ACTINET:** the Network of Excellence aims to coordinate all major nuclear actinide laboratories in Europe to research about safe handling of long lived nuclear waste and „to explore new concepts for nuclear energy generation that make better use of fissile material and generate less waste.

**RED IMPACT** wants to assess the impact of t & p on the amount of waste which must be stored ..

Besides this projects which need a long time to develop new technologies, the EC is financing research on the possibility of getting rid of the problem fast and painless – by exporting it to Russia, which is probably was the project called **SAPIERR** is going to do.

**“nuclear waste watch” has decided to object all exports of nuclear waste**

- because of the transport risk,
- the lack of participation of the people in the target region in the decision processes and
- the risk of a nuclear revival, without implementing a sound solution of the nuclear waste problem

**We think it is necessary to take a look at this SAPIERR project,** not only because waste management agencies from all our countries are members of the SAPIERR working group, but also because of their partners in this project.

**The SAPIERR consortium consists of Decom /SK and ARIUS /CH**

ARIUS, the Association for Regional and International Underground Storage, was founded in 2002.

**The ARIUS directorate, that is Charles Mc Combie, executive director and Neil Chapman program director,** comes from **Pangea Resources International (PRI)**, This is the organisation which proposed to build an international repository for HLW in Australia.

**The local resistance forced them to give up in Australia. Now they are working on the same target in Switzerland.**

**PRI** was a subsidiary of **BNFL** promoting **international repository projects**. **PRI** has ceased operation since it appeared unlikely that such projects would be commercially viable

on a reasonable timescale. (Arius website).

ARIUS has connections to the IAEA, the EC and a favour for projects in Russia. ARIUS supports strongly Minatom plans for reprocessing and long-term storage of spent fuel in Russia.

SAPIERR Working group members of

- Austria: NES, IDPC;
- CR: RAWRA,
- HU: PURAM,
- SK: ANDRAD, DECOM

Unfortunately **IDPC** (original address Costa Rica) has opened a second (letterbox) company in Vienna, at the address of the Austrian enterprise ENERGO. (which probably is also not more than a letterbox). Michael Machura, representing IDPC is one of the three Austrian members of the SAPIERR working group, but he is also managing director of the company **ENERGO**:

**ENERGO** was founded as an Russian-Austrian Joint Venture Company Ltd. its prospects are: the Export and import of energy-related goods and services, Equipment deliveries, ... (energo website)

**ENERGO** has three shareholders:

- Research and Development Institute for Energy Technology (**ENTEK**), Russia
- Dr. rer.pol., Mag. jur., Professor Walter Fremuth, Austria
- **IDPC** Compania de Promocion y Desarrollo Internacional S.A. , Costa Rica

Of these three shareholders the most interesting is **ENTEK** (ak NIKIET) also known as the Research and Design Institute for Power Engineering (RDIPE), is one of the largest nuclear technology and engineering research and development centers in Russia. **NIKIET** came 1999 on the nonproliferation blacklist of the US government because of its trade with the Iranian nuclear program.

Even if the US import ban was lifted in April 2004 we have little confidence that the activities of ENTEK (and its Austrian partners) are in the interest of the Russian population.

The Objectives of SAPIERR described on the website of the EC research programme seem to be quite harmless:

- develop a framework for regional waste management in Europe
- identify amounts, of wastes – focus on spent fuel and high-level waste
- identify possible concepts for European regional storage & disposal
- identify the main safety & governance implications raised by these concepts,
- propose priorities for future studies (<http://cordis.lu>)

If you want to read what is really discussed in the SAPIERR project, you have to look on their website. The first SAPIERR workshop was in February 2004. the main speaker was Mr. McCombie of ARIUS:

Under the title overview and development of regional/multinational concepts. McCombie explained that:

- **lots of countries need geological repositories, program is too small**
- **building a DGR is expensive, therefore many countries are interested in an international solution**

As alternative Mr.McCombie's explained that there are: **countries considering to host an international repository:**

- Russia (e.g. Krasnoyarsk,Krasnokamens)
- Kazakhstan (Mangistan region)
- China (Beishan)

Mr.McCombie favours the Russian option because:

- it is politically advanced
- in Russia large remote regions are available,
- Russia is technologically capable, and
- there is local support

It is important to know the background of the players in this project, even if it is the smallest of all waste management projects funded by the EC at the moment. The first SAPIERR workshop was a PR event for an international repository for nuclear fuel. The result of this type of networking activity could be a proposal for a feasibility study and a demonstration project for HLW treatment and deposition in the “large remote regions” in Russia.